Form PTO-1595 (Rev. 07/05) OMB No. 0651-0027 (exp. 6/30/2008)

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DEPARTMENT OF COMMERCE States Patent and Trademark Office

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es). Name of conveying party(ies) Sungmin Huh deebom Kim Donggun Lee Chanuk Jeon ddittonal name(s) of conveying party(ies) attached? Yes No Nature of conveyance/Execution Date(s): Execution Date(s): Security Agreement	Name of conveying party(ies) Name of conveying party(ies) Usame and address of receiving party(ies) Name of conveying party(ies) Name and address of receiving party(ies) Name: Samsung Electronics Co., Ltd. Internal Address: Name: Samsung Electronics Co., Ltd. Internal Address: Street Address: 416, Maetan-dong, Yeongtong-gu Street Address: 416, Maetan-dong, Yeongtong-gu City: Suwon-si, Gyeonggi-do State: Country: Republic of Korea Zip: Additional name(s) & address(es) attached? Yeonghional name(s) & address(es) attached? Yeonghio	Name of conveying party(ies) Internal Address: Street Address:
Name of conveying party(ies) Sungmin Huh leebom Kim Joonggun Lee Chanuk Jeon dditional name(s) of conveying party(ies) attached? Yes ✓ No Nature of conveyance/Execution Date(s): Execution Date(s) March 24, May 3 and May 8, 2006 ✓ Assignment	Name of conveying party(ies) 2. Name and address of receiving party(ies) Name: Samsung Electronics Co., Ltd. Internal Address: Street Address: 416, Maetan-dong, Yeongtong-gu Street Address: 416, Maetan-dong, Yeongtong-gu State: Country: Republic of Korea Zip: Additional name(s) & address(es) attached? Ye Yeongtong Yeon	Same and address of receiving party(ies) Name of conveying party(ies) Name: Samsung Electronics Co., Ltd. Internal Address: Internal Address of receiving party(ies Name: Samsung Electronics Co., Ltd. Internal Address: Internal Address of receiving party(ies Name: Samsung Electronics Co., Ltd. Internal Address: Internal Address: Internal Address: Internal Address: Internal Address: Internal Address: Internal Address of receiving party(ies Internal Address: Internal Address: Internal Address: Internal Address: Internal Address: Internal Address of receiving party (ies Internal Address: Internal Address: Internal Address: Internal Address: Internal Address: Internal Address: Internal Address of receiving party (ies Internal Address: Internal
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Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

Name of Person Signing

PATENT REEL: 017935 FRAME: 0625

sheet, attachments, and documents:

ASSIGNMENT

We, Sungmin Huh, of 1405ho, 909-dong, LGjai APT., Manhyeonmaeul, Sanghyeon-Dong, Yongin-Si, Gyeonggi-Do, Republic of Korea; Heebom Kim, of 504ho, 816-dong, Hansin APT., Byeokjeokgol 8danji, Yeongtong-Dong, Yeongtong-Gu, Suwon-Si, Gyeonggi-Do, Republic of Korea; Donggun Lee, of 201ho, 102-dong, Seongwon APT., Jung-Ri, Dongtan-Myeon, Hwaseong-Si, Gyeonggi-Do, Republic of Korea; and Chanuk Jeon, of 1602ho, 520-dong, Hanyang APT., Yangjimaeul, Sunae-Dong, Bundang-Gu, Seongnam-Si, Gyeonggi-Do, Republic of Korea; having invented improvements in PHOTOMASK, METHOD OF MAKING A PHOTOMASK AND PHOTOLITHOGRAPHY METHOD AND SYSTEM USING THE SAME described in an application for Letters Patent of the United States, executed by us on even date herewith, for good and valuable consideration, receipt of which is hereby acknowledged from Samsung Electronics Co., Ltd., a Korean corporation having a place of business at 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea (and hereinafter called the Assignee, which term shall include its successors and assigns), do hereby sell, assign and transfer unto the Assignee our entire right, title, and interest in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto, in and to and under said application (which term shall include hereinafter where the context so admits all divisional, continuing, reissue and other patent applications based thereon) and the inventions (which term shall include each and every such invention, or part thereof) therein described, and any and all patents and like rights of exclusion (including extensions thereof) of any country which may be granted on or for said inventions or on said application;

And for the same consideration We do also hereby sell, assign, and transfer unto the Assignee, all our rights under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, and all other treaties of like purpose in respect of said inventions and said application, and We do hereby authorize the Assignee to apply in our name or its own name or its designee for patents and like rights of exclusion on or for said inventions in all countries, claiming (if the Assignee so desires) the priority of the filing date of said application under the provisions of said Convention, Treaty or any such other Convention or Treaty;

And for the same consideration, We do hereby agree for ourselves and for our heirs, executors, and administrators, promptly upon request of the Assignee to execute and deliver without further compensation any power of attorney, assignment, original, divisional, continuing, reissue or other application or applications for patent or patents or like rights of exclusion of any country, or other lawful documents and any further assurances that may be deemed necessary or desirable by the Assignee, fully to secure to it said right, title, and interest as aforesaid in and to said inventions, applications, and said several patents and like rights of exclusion (including extensions thereof) or any of them, all, however, at the expense of the Assignee, its successors, or assigns;

And We do hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and the corresponding Official of each country foreign thereto to issue to the Assignee, any and all patents and like rights of exclusion which may be granted in any country upon said United States application on or for said inventions;

And We do hereby covenant for ourselves and our legal representatives and agree with the Assignee, that We have granted no right or license to make, use, or sell said inventions to anyone except the Assignee, that prior to the execution of this deed our right, title, and interest in and to said inventions has not been otherwise encumbered by us, and that We have not executed and will not execute any instruments in conflict herewith.

Page 1 of 2

First or Sole Invento	r:	
Signature:	Sungmin Huh	Date: March 24th 206
Second Joint Invento	or:	
Signature:	Heebom Kim	Date: March 24th 2006
Third Joint Inventor:		
Signature:	Donggun Lee	Date:
Fourth Joint Inventor	r:	
Signature:	Chanuk Jeon	Date:

REFERENCE NO.: SAM-0773 J:\SAM\0773\assignment.wpd

Page 2 of 2

PATENT REEL: 017935 FRAME: 0627

ASSIGNMENT

We, Sungmin Huh, of 1405ho, 909-dong, LGjai APT., Manhyeonmaeul, Sanghyeon-Dong, Yongin-Si, Gyeonggi-Do, Republic of Korea; Heebom Kim, of 504ho, 816-dong, Hansin APT. Byeokjeokgol 8danji, Yeongtong-Dong, Yeongtong-Gu, Suwon-Si, Gyeonggi-Do, Republic of Korea; Donggun Lee, of 201ho, 102-dong, Seongwon APT., Jung-Ri, Dongtan-Myeon, Hwaseong-Si, Gyeonggi-Do, Republic of Korea; and Chanuk Jeon, of 1602ho, 520-dong, Hanyang APT., Yangjimaeul, Sunae-Dong, Bundang-Gu, Seongnam-Si, Gyeonggi-Do, Republic of Korea; having invented improvements in PHOTOMASK, METHOD OF MAKING A PHOTOMASK AND PHOTOLITHOGRAPHY METHOD AND SYSTEM USING THE SAME described in an application for Letters Patent of the United States. executed by us on even date herewith, for good and valuable consideration, receipt of which is hereby acknowledged from Samsung Electronics Co., Ltd., a Korean corporation having a place of business at 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea (and hereinafter called the Assignee, which term shall include its successors and assigns), do hereby sell, assign and transfer unto the Assignee our entire right, title, and interest in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto, in and to and under said application (which term shall include hereinafter where the context so admits all divisional, continuing, reissue and other patent applications based thereon) and the inventions (which term shall include each and every such invention, or part thereof) therein described, and any and all patents and like rights of exclusion (including extensions thereof) of any country which may be granted on or for said inventions or on said application;

And for the same consideration We do also hereby sell, assign, and transfer unto the Assignee, all our rights under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, and all other treaties of like purpose in respect of said inventions and said application, and We do hereby authorize the Assignee to apply in our name or its own name or its designee for patents and like rights of exclusion on or for said inventions in all countries, claiming (if the Assignee so desires) the priority of the filing date of said application under the provisions of said Convention, Treaty or any such other Convention or Treaty;

And for the same consideration, We do hereby agree for ourselves and for our heirs, executors, and administrators, promptly upon request of the Assignee to execute and deliver without further compensation any power of attorney, assignment, original, divisional, continuing, reissue or other application or applications for patent or patents or like rights of exclusion of any country, or other lawful documents and any further assurances that may be deemed necessary or desirable by the Assignee, fully to secure to it said right, title, and interest as aforesaid in and to said inventions, applications, and said several patents and like rights of exclusion (including extensions thereof) or any of them, all, however, at the expense of the Assignee, its successors, or assigns;

And We do hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and the corresponding Official of each country foreign thereto to issue to the Assignee, any and all patents and like rights of exclusion which may be granted in any country upon said United States application on or for said inventions;

And We do hereby covenant for ourselves and our legal representatives and agree with the Assignee, that We have granted no right or license to make, use, or sell said inventions to anyone except the Assignee, that prior to the execution of this deed our right, title, and interest in and to said inventions has not been otherwise encumbered by us, and that We have not executed and will not execute any instruments in conflict herewith.

Page 1 of 2

First or Sole Invent	or:	
Signature:	Sungmin Huh	Date:
Second Joint Invent	tor:	
Signature:	Heebom Kim	Date:
Third Joint Invento	r:	
Signature:	Donggun Lee	Date: 2006 105 10f
Fourth Joint Invent	or:	
Signature:	Chanuk Jeon	Date:

REFERENCE NO.: SAM-0773 J:\SAM\0773\assignment.wpd

Page 2 of 2

PATENT REEL: 017935 FRAME: 0629

ASSIGNMENT

We, Sungmin Huh, of 1405ho, 909-dong, LGjai APT., Manhyeonmaeul, Sanghyeon-Dong, Yongin-Si, Gyeonggi-Do, Republic of Korea; Heebom Kim, of 504ho, 816-dong, Hansin APT., Byeokjeokgol 8danji, Yeongtong-Dong, Yeongtong-Gu, Suwon-Si, Gyeonggi-Do, Republic of Korea; Donggun Lee, of 201ho, 102-dong, Seongwon APT., Jung-Ri, Dongtan-Myeon, Hwaseong-Si, Gyeonggi-Do, Republic of Korea; and Chanuk Jeon, of 1602ho, 520-dong, Hanyang APT., Yangjimaeul, Sunae-Dong, Bundang-Gu, Seongnam-Si, Gyeonggi-Do, Republic of Korea; having invented improvements in PHOTOMASK, METHOD OF MAKING A PHOTOMASK AND PHOTOLITHOGRAPHY METHOD AND SYSTEM USING THE SAME described in an application for Letters Patent of the United States, executed by us on even date herewith, for good and valuable consideration, receipt of which is hereby acknowledged from Samsung Electronics Co., Ltd., a Korean corporation having a place of business at 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea (and hereinafter called the Assignee, which term shall include its successors and assigns), do hereby sell, assign and transfer unto the Assignee our entire right, title, and interest in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto, in and to and under said application (which term shall include hereinafter where the context so admits all divisional, continuing, reissue and other patent applications based thereon) and the inventions (which term shall include each and every such invention, or part thereof) therein described, and any and all patents and like rights of exclusion (including extensions thereof) of any country which may be granted on or for said inventions or on said application;

And for the same consideration We do also hereby sell, assign, and transfer unto the Assignee, all our rights under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, and all other treaties of like purpose in respect of said inventions and said application, and We do hereby authorize the Assignee to apply in our name or its own name or its designee for patents and like rights of exclusion on or for said inventions in all countries, claiming (if the Assignee so desires) the priority of the filing date of said application under the provisions of said Convention, Treaty or any such other Convention or Treaty;

And for the same consideration, We do hereby agree for ourselves and for our heirs, executors, and administrators, promptly upon request of the Assignee to execute and deliver without further compensation any power of attorney, assignment, original, divisional, continuing, reissue or other application or applications for patent or patents or like rights of exclusion of any country, or other lawful documents and any further assurances that may be deemed necessary or desirable by the Assignee, fully to secure to it said right, title, and interest as aforesaid in and to said inventions, applications, and said several patents and like rights of exclusion (including extensions thereof) or any of them, all, however, at the expense of the Assignee, its successors, or assigns;

And We do hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and the corresponding Official of each country foreign thereto to issue to the Assignee, any and all patents and like rights of exclusion which may be granted in any country upon said United States application on or for said inventions;

And We do hereby covenant for ourselves and our legal representatives and agree with the Assignee, that We have granted no right or license to make, use, or sell said inventions to anyone except the Assignee, that prior to the execution of this deed our right, title, and interest in and to said inventions has not been otherwise encumbered by us, and that We have not executed and will not execute any instruments in conflict herewith.

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First or Sole Invent	or:	
Signature:	Sungmin Huh	Date:
Second Joint Inven	tor:	
Signature:	Heebom Kim	Date:
Third Joint Invento	r:	
Signature:	Donggun Lee	Date:
Fourth Joint Invent	or:	
Signature:	JEON CHAN UK Chanuk Jeon	Date: 19ay 3rd, 2006

REFERENCE NO.: SAM-0773
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